“Buried Treasures:
Getting to Know the Lesser-known Bulbs”

By Valerie Jean Rose

September 11, 2009

Plant unusual bulbs now for springtime surprises.

What do you call a grape hyacinth that is yellow, not purple? Or violets that are not violet-colored and look like small Asiatic lilies? And why is this miniature daffodil called ‘Baby boomer’ – shouldn’t that be Baby Bloomer? It seems like a sweet-looking flower. I don’t see any gray hair or unwelcome bulges. Actually, these unique flowers are blooms from some lesser-known flower bulbs. When planted now through mid- autumn, these lovely tubers reveal their unique beauty in the spring. In fact, "Buried Treasures: Getting to Know the Lesser-known Bulbs" is the focus of next week’s Know and Grow workshop. Jeanette Degoede of Skagit Valley’s Tulip Town will introduce an array of unusual bulbs, along with planting tips and information on foiling the soil-borne diseases that can turn these lovely flowers into mush.

‘Apricot Fox’ tulip is new to the U.S. – one of the unique bulbs you will meet at next week’s Know & Grow workshop. Submitted photo.

‘Golden Fragrance’ is in the hyacinth family. Submitted photo.

Phytophthora, Rhizoctonia, Fusarium, Botrytis, and Armillaria are some of the soil borne pathogens living underfoot in the Pacific Northwest. With our climate’s abundant moisture and soil pH, these microscopic bacteria, viruses and nematodes have an ideal environment for growth. There are far more pathogens here than gardeners – we’re outnumbered! Luckily, agricultural researchers in the U.S. and the Netherlands have developed varieties of bulbs that are disease-resistant. This is great for gardeners, and essential for Skagit County’s agricultural industry. Our verdant valley produces more tulip, daffodil and iris bulbs than any other county in the U.S.; about 20 million bulbs are harvested each summer on over 1,000 acres. And you thought your perennial bed was big!

You may never see the microscopic Botrytis fungus, but you have probably seen the damage it causes, known as 'Tulip Fire.' Diseased bulbs will emerge, with withered, distorted leaves flecked with pale splotches. If flowers appear at all the petals will look bleached and spotty. All this wreckage comes from tiny fungal spores overwintering in the soil on infected bulbs! So planting healthy, unblemished bulbs is essential.

In the spring, when you finally enjoy the emerging bulbs, check for diseased foliage. If you spot blighted leaves and flowers, remove the entire plant. Place this in the garbage, not the compost – you don't want to transfer the fungus into a damp, new home where it can flourish. If possible, carry out this inspection and removal process when plants are not wet with rain or dew, since the fungus travels easily in water.

'Baby Boomer' is a miniature daffodil, just now being introduced in this country. Submitted photo.

If you do find infected bulbs, the soil in this bed is contaminated. At the end of the blooming season, lift the remaining (healthy) bulbs and dust with anti-fungal sulphur powder. If you are using organic growing methods, worry not – sulphur and copper sulphate are acceptable fungicides for organic gardens. Do not plant tulips or other flower bulbs in the same area for at least three years – no need to feed this fungus! And it gives you a good excuse to turn another patch of lawn into a flower bed.

Well-drained soil is essential for limiting soil-borne diseases, since saturated soil sets out the welcome mat for unwanted microbes to move in, grow and spread. Since we plant spring-blooming bulbs in the fall, they have to live for months in our notoriously rain-blessed environment. Planting bulbs in well-drained soil is essential.

Coconut coir, the fiber from coconut shells, is an abundant substitute and performs just as well as peat moss for helping soil stay well drained. It is sold in compacted blocks.
Photo by Frank Varga/Skagit Valley Herald.

For many of us, the term 'well-drained soil' seems like science fiction, or at least fiction. Since I live on one of Skagit Valley's hills (it's actually a huge ball of clay) I've built raised beds and filled them with a nice mixture of compost, topsoil and coconut coir. Coco-what, you ask? Coconut coir is a substitute for peat moss, turning a waste product into a useful resource. Both peat moss and coconut coir lighten the soil, helping it to allow air to enter and improving soil structure.

Peat moss takes centuries to form and wetland ecologists say that peat is being mined at unsustainable rates – it's removed from bogs much faster than it builds up again. Linda McMahan, horticulturist at the Oregon State University Extension Service, notes that coconut coir is a viable alternative to peat moss. "When coconuts are harvested and husked, the long fibers are removed and used for…upholstery stuffing, rope, doormats, and brushes. The short fibers are left over and have found use in horticulture as coconut peat." Researchers at Auburn University and the University of Arkansas found that coconut coir performed as well as peat moss, so you're not losing anything by using this abundant substitute.

Master Gardener Valerie Rose tucks some coconut coir into a pot before planting flower bulbs last week at her home in Mount Vernon. Since coconut coir absorbs and holds water, it is best to soak the fiber before adding it to pots and garden beds. Photo by Frank Varga/Skagit Valley Herald.

Be sure to dig the coir deeply into the garden bed before planting, at least several inches deeper than you place your bulbs. You want that drainage functioning below the roots, draining excess water away from the roots. A medium or large pot or other container can be a great place to cultivate a spring bouquet, whether you live in an apartment or on a farm. Choose pots or planters big enough to bury the bulbs at their proper depth, with several more inches below for the roots to grow downward. Make sure the container has at least one good drainage hole, and keep it free of debris that could turn a lovely container into a small bathtub.

By planting healthy, disease-resistant bulbs in well-drained soil, an array of jewel-like flowers should brighten your garden next spring. For more information on cultivating flowers from healthy bulbs, come to next week's Know and Grow class (details in sidebar.)

Preventing Soil-borne Diseases in Flowering Bulbs

- Choose the right location for planting, with good drainage and sunlight
- Select disease-resistant plant bulbs, plant them at the right time of year – spring-flowering bulbs are planted in the fall, while most summer-blooming varieties are planted in the spring
- Manage your soil's pH – ideal range for tulips is 6.5 – 7

Eradicate soil-borne pathogens

- Plant new, healthy bulbs in a different garden bed. Do not plant bulbs in previously infested bed for at least three years.
- Remove diseased leaves, dispose in garbage, do not compost
- Sulphur and copper fungicide products are allowed under organic growing guidelines
- If the soil is highly infested with these pathogens, you may need to remove the dirt, and replace it with disease free garden soil

KNOW & GROW WORKSHOP

What: "Buried Treasures: Getting to Know the Lesser-known Bulbs" with Jeanette Degoede of Tulip Town.

When: Tuesday September 15, 1:00 – 2:30pm

Where: WSU NWREC, 16650 State Route 536 (Memorial Hwy.)

Information: Phone 360-428-4270, ext. 0, for more information. Free, open to all.